

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A mobile communication system comprising:

a mobile terminal;

a radio access network which comprises:

a radio base station which carries out packet communication with said mobile terminal through a radio channel, and

a radio channel control station which controls said radio base station; and

a home agent which stores data transmitted from said mobile terminal and associated with a current position of said mobile terminal,

wherein the packet communication between said mobile terminal and said radio channel control station is controlled based on radio channel control of packet switching connection, and

the packet communication from said ~~core network~~ home agent to said radio channel control station is controlled based on mobile IP (mobile Internet protocol),

wherein said home agent receives packet data destined to said mobile terminal and transfers the packet data to said mobile terminal based on the stored data associated with the current position of said mobile terminal, and said home agent includes an IP module that encapsulates the packet data received from a correspondent node, generates encapsulated packet data having the data associated with the current position of said mobile terminal as a destination address, and transmits the encapsulated packet data to said mobile terminal, and

wherein said mobile terminal includes an IP module that decapsulates the encapsulated packet data that has been transmitted from said IP module of said home agent, to extract the packet data.

2. (canceled)

3. (original) The mobile communication system according to claim 1, wherein said home agent is provided in a core network which carries out call control of said mobile terminal.

4. (original) The mobile communication system according to claim 1, wherein said home agent is provided on the Internet between said radio access network and another radio access network.

5. (original) The mobile communication system according to claim 1, wherein said home agent is provided in said radio access network.

6-8. (canceled)

9. (currently amended) The mobile communication system according to claim 1, wherein said ~~mobile terminal comprises: a~~ mobile IP module ~~which~~ transmits the data associated with the current position of said mobile terminal to said home agent.

10. (original) The mobile communication system according to claim 1, wherein said mobile terminal comprises:

a radio channel control module which transmits the data associated with the current position of said mobile terminal, and

said radio channel control station comprises:

a radio channel control module which receives the data associated with the current position of said mobile terminal and converts to transmit to said home agent.

11. (canceled)

12. (currently amended) A control method in a mobile communication system, comprising the steps of:

[[a]] transmitting user data for position registration of [[said]] a mobile terminal to a home agent of a core network via a radio channel control station; and

[[b]] registering the user data by said home agent;
said home agent receiving packet data destined to said mobile terminal once and transferring the packet data to said mobile terminal based on the data for position registration of said mobile terminal;

said home agent generating encapsulated packet data having the data for position registration of said mobile terminal

as a destination address, and transmitting the encapsulated packet data to said mobile terminal; and

said mobile terminal decapsulating the encapsulated packet data that has been transmitted from said home agent, to extract the packet data.

13. (currently amended) The control method according to claim 12, further comprises:

[[c]] establishing a channel between a mobile terminal and a radio channel control station, and

wherein said [[a]] transmitting step comprises the step of transmitting the user data to a home agent of said core network via said radio channel control station using the established channel.

14. (currently amended) The control method according to claim 12, wherein said [[a]] transmitting step comprises the steps of:

[[d]] converting the user data into a control signal by said mobile terminal;

[[e]] transmitting the control signal to said radio channel control station;

[[f]] reproducing the user data from the control signal; and

[[g]] transmitting the reproduced user data to said home agent.

15. (currently amended) The control method according to claim 12, wherein said [[(a)]] transmitting step comprises the steps of:

[[(h)]] transmitting a control signal indicating the user data to said radio channel control station;

[[(i)]] converting the control signal into the user data by said radio channel control station; and

[[(j)]] transmitting the user data to said home agent.

16. (currently amended) The control method according to claim 12, wherein said [[(a)]] transmitting step is carried out in response to a position control notice signal from said radio channel control station.

17. (original) The control method according to claim 12, wherein communication between said mobile terminal and the radio channel control station is carried out based on radio channel control of packet switching connection, and

communication from said core network to said radio channel control station is carried out based on mobile IP (mobile Internet protocol).